## **American Cyanamid**

The American Cyanamid Superfund Site in Bridgewater Township, New Jersey is a 575-acre site where various previous owners manufactured numerous chemicals and pharmaceuticals for more than 90 years, resulting in the contamination of waste disposal areas (referred to as impoundments), soil and groundwater. The impoundments contain highly toxic materials and the soil and groundwater are primarily contaminated with volatile organic compounds (VOCs), semi-VOCs, and metals. The current owner of the site is Wyeth Holdings, LLC. The New Jersey Department of Environmental Protection was originally the lead for the site. In 1998, a 140-acre portion of the 575-acre site was deleted from the Superfund list and was redeveloped for commercial use. In 2009, EPA took over the lead role at the site.

In 2010, high concentrations of benzene were discovered seeping into the Raritan River. While the EPA continued its investigation of the extent of contamination on the entire site, it installed a system to capture groundwater and prevent the contamination from reaching the river. In 2012, the EPA selected a site-wide cleanup plan that addresses most areas of the site, including contaminated soil and groundwater at the site, as well as material in three of the waste impoundments. This cleanup work is in progress.

A plan to address the remaining portion of the site – two highly contaminated impoundments referred to as impoundments 1 and 2 -- is still in development. Due to the unique and highly complex nature of the contaminants within impoundments 1 and 2 and their proximity to the Raritan River, the EPA required a in depth technical pilot study to evaluate various techniques of treating the material within the two impoundments. This pilot study is complete, and the EPA is currently working on developing a proposed cleanup plan for the two impoundments. The EPA expects to propose a plan for impoundments 1 and 2 in the first half of 2018.

## Berry's Creek Study Area (Ventron/Velsicol Superfund Site)

The Berry's Creek Study Area in Bergen County, New Jersey is a portion of the Ventron/Velsicol Superfund site. Berry's Creek is a tidal estuary off the Hackensack River, and its main tributaries have tide gates to limit the extent of tidal influence to the nearby communities. The site includes approximately six miles of creek, from its headwaters to the Hackensack River, the tributaries to the creek, and almost 800 acres of wetlands that are hydrologically connected to Berry's Creek. Two other federal Superfund NPL sites, the Scientific Chemical Processing Site and the Universal Oil Products Site, and several NJ state hazardous waste sites, are within the Berry's Creek watershed. The Berry's Creek Study Area has been divided into four areas based on hydrological properties: Upper Berry's Creek, Middle Berry's Creek, Lower Berry's Creek, and Berry's Creek Canal. The primary contaminants of concern at the site are mercury, methyl mercury and PCBs.

Under a legal agreement with EPA, 120 parties potentially responsible for contamination in the area started a detailed investigation and study of the area in 2009. The complex study work continues, but much of the work is completed and during the investigation, it became clear that sediment in two areas of the creek – Upper Berry's Creek and Middle Berry's Creek – pose the most immediate and greatest risk due to high concentrations of mercury and PCBs in the top layer of sediment, which is the most accessible to fish and other wildlife. EPA subsequently asked the group of responsible parties to focus on a study of those areas first and consider interim cleanup actions to address contamination that poses the most risk first while the overall study of the contamination continues. The EPA expects to (decide whether to) propose an interim cleanup action in mid-2018/late 2018.

## Upper Nine of the Passaic River (Diamond Alkali Superfund Site)

The Diamond Alkali Superfund Site includes the former Diamond Alkali manufacturing facility located at 80-120 Lister Avenue in Newark, New Jersey, a 17-mile stretch of the Lower Passaic River from Dundee Dam to Newark Bay, and the Newark Bay Study Area. The 17-mile stretch of the Passaic River is being addressed in segments, with the lower eight miles broken out from the upper nine miles. The Newark Bay Study Area includes Newark Bay and minor portions of the lower Hackensack River, Arthur Kill and Kill van Kull. Production of DDT and other chemical products began at 80 Lister Avenue in the 1940s and ran through the 1960s, including the herbicides used in the defoliant known as "Agent Orange." These products produced dioxin, which is the main contaminant of main concern in the Passaic River, along with other chemicals such as PCBs and pesticides.

In March 2016, EPA selected its cleanup plan, after extensive public input, for the lower 8.3 miles of the Lower Passaic River, which contains about 90 percent of the contamination. The cleanup plan requires bank-to-bank remediation.

Under a legal agreement with EPA, a group of responsible parties is studying the entire 17-mile stretch of the Passaic to determine an overall cleanup plan, with a focus on actions needed in the upper nine miles of the 17-mile stretch that will augment and complement the cleanup work which is already being engineered for in the lower eight miles. The EPA expects to propose measures to address contamination from the upper nine miles before the end of 2018.